



ANNUAL DRINKING WATER  
QUALITY ASSURANCE REPORT  
CAMP BARRETT 2003

## INTRODUCTION

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The water is processed at the Water Treatment Plants in Stafford County.

## SUMMARY

Both Stafford County and MCB Utilities routinely monitor for contaminants in your drinking water according to Federal and State laws. This report shows the results of our monitoring for the period of January 1st to December 31st, 2002. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. This report contains information on all contaminants found in your drinking water. An explanation of the results is included. In order to ensure tap water is safe to drink, the Environmental Protection Agency prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Virginia Department of Health enforces the regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection of public health. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

## CONCLUSION

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. As reported in the Quantico Sentry, water mains and fire hydrants are flushed twice a year. This may cause temporary water discoloration. We apologize for any inconvenience. Our goal is to provide water of excellent quality to every customer. We at the Utilities Section, work around the clock to provide top quality water to every tap. Our customers can help protect themselves and our water system by careful use of this resource, which is the heart of our community, our way of life and our children's future. If you have questions about what you can do to help, please contact our office for further information.

Under a new program being developed by the Virginia Department of Health, a detailed source water assessment will be conducted within the next few years to find ways to better protect our water sources. After the assessment is conducted, we will provide you with information about potential sources of contamination and measures to reduce or eliminate the sources of contamination. Our water sources are within the confines of the Base and are therefore protected from most outside sources of contamination.



THE FACTS.

This report contains information on all regulated contaminants found in your drinking water. Additionally, over 85 water tests are performed for a variety of contaminants not found in the water delivered to the Base. An explanation of the results is included.

Maximum contaminants levels are set at very stringent levels. To understand the possible health effects described contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

MICROBIOLOGICAL CONTAMINANTS:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. We are please to announce there was no evidence of bacterial contamination of our drinking water.

Stafford County has notified the Base that two technical violations occurred last year. The following is information they supplied:

Monitoring Violation Notice

We are required to monitor and record the turbidity from each individual filter every 15 minutes. In May 2002, the automatic monitoring equipment at the Able Lake Water Treatment facility failed to record the turbidity values on the computer disk. The filter turbidity monitors were in operation, and no high turbidity alarms were received. The data simply was not recorded as required by the regulations.

The filter turbidities are displayed on a monitor and are checked by the operators on a regular basis. At no time was there any indication of a problem with any of the filters or the overall water quality.

However, the fact that the values were not recorded every 15 minutes resulted in a violation of the Interim Enhanced Surface Water Treatment Rule requirements. You do not need to take any actions as a result of this failure. We are now downloading the filter turbidities to a computer on a daily basis to ensure that the results are being recorded as required.

Total Organic Carbon Removal Violation

In the Table of Detected Contaminants for the Smith Lake WTP, you will notice that the facility was not in compliance with MCL for Total Organic Carbon (TOC). The MCL is a treatment technique requiring that the average of four quarterly removal ratios be 1.0 or higher. The Smith Lake WTP average was .95 for the calendar year of 2002.

TOC has no health effects. However organic material in the water can react with chlorine to form disinfection byproducts such as trihalomethanes (THMs) and haloacetic acids (HAA5s). These disinfection byproducts, when present in concentrations exceeding their MCLs, can lead to adverse health effects including liver, kidney, or nervous system problems as well as an increase risk of cancer. Even though the facility failed to meet the required ratio, the levels of THMs and HAA5s were below their respective MCLs. We are currently evaluating treatment changes to further enhance our TOC removal.

If you have any questions about the report or concerning your water utility, please contact **Mr. Michael Herlan, Utilities QAE, Public Works Branch, at 784-5102.**

SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune system compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water you may wish to flush your tap for 30 seconds before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). **The lead levels found in samples taken on Base are well below regulatory limits.**

We strongly recommend that our customers not use water from the hot water tap for consumption. Any contaminants found in the water may be accumulated in the hot water tank. This would be true anywhere, regardless of the water source. This does not mean that there is anything wrong with our drinking water. All water tests are conducted on water from the cold-water tap. Our concern is that the water quality is unknown when water from the hot water tap is consumed. We believe you are better served by heating cold-water for this purpose.

WATER QUALITY DATA REPORT

CAMP BARRETT 2002

TEST RESULTS

Microbiological Contaminants	MCLG	MCL One positive	# of Positive samples	Violation Y/N	Possible Sources
Tctal Ccliform Bacteria	%of sample	0	0*	No	Naturally present in the environment
Tctal Ccliform & Ecoli		0	0*	No	Human and animal fecal waste

No positive samples since July1999

LEAD AND COPPER CONTAMINANTS

Sampling Date	Units	MCLG	Action Level	Level Detected	Action level exceeded	# of Sites Exceeding AI	Source of Contamination
Copper	ppm	1.3	AL=1.3	0.102	No	0	Corrosion of household plumbing systems Erosion of natural deposits
Lead**	ppb	0	AL=15	<5**	No	1**	Corrosion of household plumbing systems Erosion of natural deposits

One test was 19.3ppb. All others were <5. The reporting value is the 90th percentile.

These test results are from September 2002.

KEY TO ABBREVIATIONS

(ND) Non-Detects	laboratory analysis indicates that the constituent is below the detection level
(ppm) Parts per million, (mg)Milligrams per liter	one part per million corresponds to one minute in two years, or a penny in \$10,000.
(ppb)Parts per billion, Micrograms per liter	one part per bilion correspnds to one minute in 2000 years, or a penny in \$10,000,000.
(pCi/L)Picocuries per liter	picocuries per liter is a measure of the radioactivity in the water.
(NTU) Nephelometric Turbidity Unit	nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noicible to the average person.
Action Level	the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
(TT)Treatment Techniques	A treatment technique is a required process intended to reduce level of contaminant in drinking water
Maximum Containment Level	The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology
Maximum Containment Level Goal	The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to MCLG's allow for a margin of safety